

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of RUEGER, et al.

Serial No.

Filing Date Herewith

Title COMPENSATION OF BATCH VARIATION IN THE TRAVEL DUE TO VARIATIONS IN THE LAYER THICKNESS OR NUMBER OF LAYERS IN MULTI-LAYER PIEZOELECTRIC ELEMENTS

**PRELIMINARY AMENDMENT**

**In the claims:**

Please amend the claims as follow:

3. (Amended) The apparatus of claim 1, characterized in that the control unit determines the activation voltage value and the activation charge values respectively as a function of the piezoelectric element's (10, 20, 30, 40, 50 or 60) normal voltage, normal charge and a correction factor.
6. (Amended) The apparatus of claim 3, characterized in that the control unit (D) determines the correction factor as a function of temperature.
10. (Amended) The method as defined in claim 8, characterized in that the activation voltage and the activation charge values respectively, are a function of the piezoelectric element's (10, 20, 30, 40, 50 or 60) normal voltage, the piezoelectric element's (10, 20, 30, 40, 50 or 60) normal charge and a correction factor.
13. (Amended) The method as defined in claim 10, characterized in that the control unit determines the correction factor as a function of temperature.

15. (Amended) The method as defined in claim 10, characterized in that the correction factor is measured as a part of the manufacturing process.
16. (Amended) The method as defined in claim 10, characterized in that the correction factor is stored for each cylinder within an EEPROM of the control unit (D).

#### R E M A R K S

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "VERSION WITH MARKINGS TO SHOW CHANGES MADE."

Respectfully submitted,

Dated:

4/2/01

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3. (Amended) The apparatus of claim 1 [or 2], characterized in that the control unit determines the activation voltage value and the activation charge values respectively as a function of the piezoelectric element's (10, 20, 30, 40, 50 or 60) normal voltage, normal charge and a correction factor.

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6. (Amended) The apparatus of claim 3, [4 or 5,] characterized in that the control unit (D) determines the correction factor as a function of temperature.

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10. (Amended) The method as defined in claim 8 [or 9], characterized in that the activation voltage and the activation charge values respectively, are a function of the piezoelectric element's (10, 20, 30, 40, 50 or 60) normal voltage, the piezoelectric element's (10, 20, 30, 40, 50 or 60) normal charge and a correction factor.

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13. (Amended) The method as defined in claim 10, [11 or 12,] characterized in that the control unit determines the correction factor as a function of temperature.

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15. (Amended) The method as defined in claim 10 [3-14], characterized in that the correction factor is measured as a part of the manufacturing process.

16. (Amended) The method as defined in claim 10 [3-15], characterized in that the correction factor is stored for each cylinder within an EEPROM of the control unit (D).